Turkey Cove Habitat Improvement Project

Draft Environmental Assessment Comments and Concerns

This document contains the George Washington and Jefferson NFs responses to substantive comments that were received during the comment period for the Turkey Cove Ruffed Grouse Habitat Improvement Project Draft Environmental Assessment (EA).

An email and hardcopy letters were sent out and a legal notice was published in *The Coalfield Progress* on Friday, February 22nd, 2019 to notify interested parties of the availability of the Turkey Cove Ruffed Grouse Habitat Improvement Project EA. This initiated the comment period, which ended on March 25th, 2019.

The Forest Service received correspondence from eight individuals, organizations, and agencies. These comments have been analyzed and responded to using a process called content analysis. All notable comments were assigned a unique contact number generated from the correspondence number and the comment number (e.g. #38-2 would be the second comment identified from letter number 38). Commenters and their associated organizations are shown in Table 1, below.

Similar comments were grouped together and for each group a concern statement was developed. Concern statements are meant to capture the thought, idea, or issue common to all of the associated comments. They often represent the view of many respondents, but may also be derived from just one person's input. Concern statements provide the framework for preparing responses to public comment.

Comments may:

- Identify issues (cause and effect relationship between proposed action and effects);
- Suggest alternative ways to conduct the action, or lessen the impacts of the action through mitigation or project design feature;
- Suggest a method to measure effects; and/or,
- Provide new information for the interdisciplinary team to consider.

Not all comments are relevant to the decision; comments are not relevant (non-substantive) if they are:

- Beyond the scope of the proposal;
- Unrelated to the decision being made;
- Already decided by law, regulation or policy;
- Conjectural in nature or not supported by scientific evidence; or,
- General in nature (not specific to this project) or position statements not supported by reasons.

Table 1. Respondents to Turkey Cove Habitat Improvement Project Draft Environmental Assessment

Letter #	Author Name	Organization Name	Date Submitted
1	Thacker, Wayne	Rocky Mountain Elk Foundation	2/25/2019
2	Feasel, Darrel		3/4/2019
3	Artley, Dick		3/9/2019
4	Howard, Janine	Virginia Department of Environmental Quality	3/12/2019
5	Toombs, Elizabeth	Cherokee Nation Tribal Historic Preservation Office	3/20/2019
6	Hypes, Rene'	Department of Conservation and Recreation-Natural Heritage	3/22/2019
7	Worrell, William		3/22/2019
8	Brooks, Steve	The Clinch Coalition	3/25/2019

General

General - #1: These comments express support for the Turkey Cove Habitat Improvement Project.

#1-1 The Rocky Mountain Elk Foundation's Virginia State Leadership Team strongly supports the Turkey Cove Grouse Habitat Improvement Project as described in the Draft EA.[...]Further, we encourage restoration of a GWJEFF habitat mosaic that includes mature growth of varying ages, understory structure and canopy conditions. To assure forest resilience and health, we support active forest management to create regenerating young forests, a critical, but largely missing on the GWJEFF NFs, component of a complete mosaic and habitat for hundreds of animal species.

#2-1 I strongly support any project that will be used for creating, enhancing and protecting early successional forest habitat for ruffed grouse and American woodcock.

#7-1 I fully support the proposed alternative one for management of this area to create and enhance habitat for ruffed grouse and woodcock

#7-2 Please keep me updated on the planned actions in the Turkey Cove project.

#8-13 We are very supportive of the proposed use of funds raised by the project to support water quality/recreation infrastructure improvement projects elsewhere on the district.

Response: Thank you for your comments and your support for the Turkey Cove Habitat Improvement Project. We appreciate your interest and participation in the planning process.

General - #2: These comments were determined to be non-substantive.

#3-9 Comment: Larry Freeman, the Senior Consultant for the Shipley Group that the USFS contracts to teach the NEPA process states: "A single action alternative is a risky agency choice, especially if you determine that your EA or EIS is likely to be a high-risk and controversial document."[...]Comment: Please don't ignore the Shipley Group NEPA recommendations as you prepare your final EA. The USFS spends millions of dollars to hire this company to teach agency employees how to apply the NEPA process correctly?

#3-10 Comment: Ranger Davalos, even children know logging incrementally affects climate change:

#3-17 Comment: The public does not want natural resources in their public land that will be inherited by future generations to be destroyed in order to provide corporate profit opportunities.

#3-24 Comment #: The Turkey Cove timber sale will take away more undeveloped national forest acres from the legacy the unborn kids of the future should inherit.

#8-4 Concerning the use of fire, once again we believe it is being over used!

#8-7 We believe that the Forest Service should commit to a draft EA for this process.

Response: These comments are conjectural in nature or position statements not supported by reasons.

#4-11 DEQ recommends a database review to determine if there are any waste sites located in close proximity to a project site[...]DEQ encourages all projects to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

#4-13 The removal, relocation or closure or installation/operation of any regulated petroleum storage tanks, aboveground storage tank (AST) or underground storage tank (UST), must be conducted in accordance with the requirements of the Virginia Tank Regulations 9 VAC 25-91-10 et seq. (AST) and / or 9 VAC 25-580-10 et seq. (UST).

#4-16 Potential impacts to the public water distribution system or sanitary sewage collection system should be verified with the local utility.

#4-18 The VDOT Planning and Investment Management Division reviewed the proposal and determined that the project will have no known impacts to transportation infrastructure.

#4-19 We have several pollution prevention recommendations that may be helpful during construction and for operation of this facility:

- Consider development of an effective Environmental Management System (EMS). An effective EMS will ensure that the proposed facility is committed to complying with environmental regulations, reducing risk, minimizing environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program (VEEP). VEEP provides recognition, annual permit fee discounts, and the possibility for alternative compliance methods.
- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider contractors' commitment to the environment when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.

#6-7 There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Response: These comments are unrelated to the decision being made; they address issues not present within the project area.

#4-6 USDA and its authorized agents conducting regulated land-disturbing activities on private and public lands in the state must comply with VESCL&R and Virginia Stormwater Management Laws and Regulations[...]and other applicable federal non- point source pollution mandates

#4-7 USDA must prepare and implement an erosion and sediment control (ESC) plan to ensure compliance with state law and regulations.

#4-8 The operator or owner of a construction activity involving land disturbance of equal to or greater than 1 acre is required to register for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). The SWPPP must be prepared prior to submission of the registration statement for coverage under the General Permit, and it must address water quality and quantity in accordance with the Virginia Stormwater Management Program (VSMP) Regulations.

#4-9 During future construction actions, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution

#4-10 If future project activities include the open burning of construction material or the use of special incineration devices, this activity must meet the requirements under 9 VAC 5-130 et seq. of the Regulations for open burning, and may require a permit

#4-12 Any soil that is suspected of contamination or wastes that are generated during construction-related activities must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. All demolition and construction waste, including excess soil, must be characterized in accordance with the Virginia Hazardous Waste Management Regulations prior to disposal at an appropriate facility. It is the generator's responsibility to determine if a solid waste meets the criteria of a hazardous waste and as a result be managed as such.[...]If evidence of a petroleum release is discovered during implementation of this project, it must be reported to DEQ, as authorized by Virginia Code § 62.1-44.34.8 through 9 and 9 VAC 25-580-10 et seq. Petroleum contaminated soils generated during construction of this project must be characterized and disposed of properly

#4-22 Should it be determined that surface water and/or wetland impacts would occur, a Virginia Water Protection Permit issued by the DEQ may be required pursuant to Virginia Code §62.1-44.15:20.

#4-23 This project must comply with Virginia's Erosion and Sediment Control Law (Virginia Code § 62.1- 44.15:61) and Regulations (9 VAC 25-840-30 et seq.) and Stormwater Management Law (Virginia Code § 62.1-44.15:31) and Regulations (9 VAC 25-870-210 et seq.) as administered by DEQ. Activities that disturb 10,000 square feet or more would be regulated by VESCL&R and VSWML&R. Erosion and sediment control, and stormwater management requirements should be coordinated with the DEQ SWRO.

#4-24 For projects involving land- disturbing activities of equal to or greater than one acre the applicant is required to register for coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities (9 VAC 25-870-1 et seq.).

#4-25 This project is subject to air regulations administered by the Department of Environmental Quality. The following sections of the Code of Virginia and Virginia Administrative Code are applicable:

- fugitive dust and emissions control (9 VAC 5-50-60 et seq.); and
- open burning restrictions (9 VAC 5-130).

Contact local fire officials for information on any local requirements pertaining to open burning. Coordinate with the SWRO (Crystal Bazyk, 276-676-4829) with questions related to air regulations.

#4-26 All solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations.

> **Response:** These comments address issues already decided by law, regulation, or policy since the agency must comply with all applicable federal, state, and local environmental regulations.

Climate Change

Climate Change - #1: The Forest Service should analyze all processes implemented in this project for climate change impacts.

#3-11 Comment: Ranger Davalos, you should know logging emits more CO2 than wildfire.

#3-12 Comment #: National Geographic magazine features logging's effect in climate change.

#3-13 Comment: Forests are natural carbon sinks. Carbon sinks absorb carbon dioxide. Un-manipulated (unlogged) Forests reduce the concentration of greenhouse gases into the atmosphere and delay the sordid effects of climate change. Trees store carbon dioxide. When the trees are removed (logged or burned) the stored carbon dioxide is released into the atmosphere.

#3-14 Request for changes to be made to the final NEPA document: Include an accurate, truthful discussion of the direct and indirect effects of how logging this sale will affect greenhouse gases and climate change.. Also include the best science documents shown above in your Reference section and cite them in the text.

#8-20 this project needs to address and consider long term impacts of climate change on our region[...]Long term projections of species adaptation, migration, and resilience must also be substantively addressed.

Response: There are several overarching considerations when addressing climate change. The first is the appropriate scale at which to consider project-level and Forest-level management impacts on climate change. The second is how active management can increase ecosystem resiliency to climate change stressors.

Trees indeed store carbon. Carbon dioxide (CO_2) in the atmosphere is necessary for plants/trees to grow. As such, forests play an important role in the global carbon cycle by absorbing carbon dioxide during photosynthesis. As a result of photosynthesis, carbon is removed from the atmosphere and ultimately stored in the bole of a tree above ground and in the roots below ground.

Prescribed fire treatments increase forest carbon storage. Regeneration harvest treatments that result in early successional habitat reduce the long term carbon sequestration of stands relative to light thinning or

no treatment (Davis et al., 2009 and Keyser and Stanley 2012). While commercial forest management may reduce carbon sequestration when compared to untreated stands, these levels of carbon emissions are meaningless to quantify at a project level. What can be considered is that these management activities reduce the vulnerability of forested stands to water stress, insect and disease outbreaks and wildfires which are factors that can be worsened by climate change.. See also, *Assessing the Potential Effects of Climate Change on the George Washington and Jefferson National Forests*. Found here; https://www.fs.usda.gov/ccrc/sites/default/files/documents/files/George_Washington_and_Jefferson_TACCIMO_fact_sheet.pdf

This project is consistent with our present 2009 guidance of climate change considerations in project level NEPA analysis, https://www.fs.fed.us/emc/nepa/climate_change/index.htm , the described effects that may be addressed are inconsequential from the size of the project. Climate change impacts from forest management activities are most logically assessed at a Forest- or Region-wide level. At that scale, the agency can focus on maintaining carbon sinks. Currently the U.S. Department of Agriculture now concentrates on Building Blocks for Climate Smart Agriculture and Forestry. By developing these building blocks, USDA and its partners have demonstrated that agriculture and forests can play a significant role in helping the U.S. meet its commitment.

McNulty et al. (2017) points out that the Forest Service is subject to the Multiple Use Sustained Yield Act (MUSYA) (USDA 1960), requiring national forest lands to provide resources for outdoor recreation, range, timber, watershed health, and wildlife and fish habitat. Managing stands only for carbon storage, and sequestration can reduce other key ecosystem services (Schwenk et al. 2012). The Turkey Cove project contributes to sustain and improve biodiversity, by managing primarily for habitat maintenance and improvement. These climate change considerations are further explored in the briefing paper *George Washington and Jefferson national Forests Climate Change Considerations in Project Planning* which is included in the Turkey Cove project record.

Coordination

Coordination - #1: Please provide the Cherokee Nation (Nation) with a copy of the cultural resources survey report for the project area and halt all project activities immediately and re-contact our Offices for further consultation if items of cultural significance are discovered during the course of this project or survey.

#5-1 The Nation recommends that a cultural resources survey is conducted for this project, and requests a copy of the related report. The Nation requires that cultural resources survey personnel and reports meet the Secretary of Interior's standards and guidelines.[...] Also, the Nation requests that the George Washington and Jefferson National Forests halt all project activities immediately and re-contact our Offices for further consultation if items of cultural significance are discovered during the course of this project or survey.

#5-2 Additionally, the Nation requests that the George Washington and Jefferson National Forests conduct appropriate inquiries with other pertinent Tribal and Historic Preservation Offices regarding historic and prehistoric resources not included in the Nation's databases or records.

Response: Thank you for your interest in the Turkey Cove Habitat Improvement Project. We fully intend to keep the Cherokee Nation informed in the case that we identify any prehistoric cultural resources that may be affected by project activities.

Coordination - #2: The Forest Service should consult and coordinate with the appropriate state and federal agencies during analysis and implementation of the project. The Forest Service should also continue to solicit input from other interested and affected publics.

#4-14 Continue to coordinate with DCR-DNH to provide the requested additional information necessary for review and comment.

#4-17 Coordinate with the VDOT Wise Residency Office early in the implementation process in order to identify and address potential impacts.

#4-27 Continue to coordinate with DCR-DNH (Rene Hypes, 804-371-2708) to provide the requested additional information necessary for review and comment.

#4-28 Coordinate with the local utility regarding potential impacts to public water distribution systems or sanitary sewage collection systems as necessary. Contact VDH ODW (Arlene Fields Warren, 804-864-7781) with questions related to the recommendation's to protect public water supply sources.

#4-29 USDA should coordinate directly with DHR (Roger Kirchen, 804-482-6091) pursuant to Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations codified at 36 CFR Part 800 which require Federal agencies to consider the effects of their undertakings on historic properties.

#4-30 Coordinate with the VDOT Wise Residency Office (Jeff Sams, Jeff.Sams@vdot.virginia.gov) early in the implementation process in order to identify and address potential impacts.

#6-4 DCR recommends coordination with the Virginia Department of Game and Inland Fisheries[...]to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 - 570).

#6-6 If karst features such as sinkholes, caves, disappearing streams, and large springs are encountered during the project, please coordinate with Wil Orndorff (540-230-5960, Wil.Orndorff@dcr.virginia.gov) to document and minimize adverse impacts.[...]If the project involves filling or "improvement" of sinkholes or cave openings, DCR would like detailed location information and copies of the design specifications.

#6-9 Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

#6-10 Due to the legal status of the species associated with these T & E Waters, DCR recommends coordination with United Fish and Wildlife Service (USFWS) and Virginia's regulatory authority for the management and protection of these species, the VDGIF, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 - 570).

#8-6 Please let us know when we might meet to go over them at your convenience.

Response: The Forest Service, as outlined in our Forest Plan, will coordinate with the appropriate state and Federal agencies during the analysis and implementation of the Turkey Cove project. These include the Virginia state agencies mentioned above and the U.S. Fish and Wildlife Service (USFWS).

The USFWS is the agency that oversees direct management of animals and fish across the Nation, including administration of the Threatened and Endangered Species Act. As stated in Chapter 2 of the Forest Plan:

> *For federally listed species, the Forest coordinates closely with the U.S. Fish and Wildlife Service to avoid negative effects and to assist with recovery*.

The Forest Plan also provides support for strengthening the role and increasing opportunities for volunteers and partners to be more active as part of national forest management.

Ecosystems

Ecosystems - #1: The Turkey Cove Habitat Improvement Project should focus on ecosystem restoration and the promotion of biodiversity within the project area.

#3-6 All healthy populations of living things have dead and dying individuals. This includes conifer trees. There are many wildlife species dependent on dead and dying conifer tree species. Creating areas where most of the trees are vigorous trees will 1) eliminate the all-important biodiversity and 2) drive the wildlife to acceptable habitat which will exceed the carrying capacity of the habitat.[...]How this objection point can be resolved: Assure the final NEPA document tells the public 1) why spending their tax money to take action to create fast growing, vigorous trees is more important than letting the trees grow at their own rate which provides biodiversity, 2) the names of the flora and fauna in the sale area that thrive in decadent slow-growing trees and 3). why biodiversity is not important in the project area.

#8-9 We would like to see a restoration focus for this project[...]while restoration activities can often create Early Successional Habitat (ESH), creating ESH out of characteristic, native, relatively healthy forests is not in and of itself ecological restoration.

#8-16 the Forest Service should consider the contribution of identified existing old growth to the representation, distribution, and abundance of the specific forest type within the old growth community classifications and the desired condition of the appropriate prescription.

Response: The analysis for this project is tiered to the Final Environmental Impact Statement (FEIS) for the 2004 Jefferson (Forest Plan). The FEIS identified the potential impacts from forest management activities at a programmatic scale. Based on relevant scientific information documented in that FEIS, a wide-variety of goals, objectives, and standards and guidelines were incorporated into the Forest Plan to reduce adverse effects while considering biodiversity and ecological restoration goals. The Forest designs projects to comply with our Forest Plan to meet the programmatic scale biodiversity and restoration objectives, as well as state and federal regulations.

The project area has been surveyed for old growth in accordance with Region 8 *Guidance for Conserving and Restoring Old-Growth Forest Communities on National Forests in the Southern Region* and the March 10, 2016 letter from Forest Supervisor Joby Timm. No additional old growth areas were identified.

Ecosystems - #2: The Forest Service should be aware of, and take precautions to protect, rare and sensitive resources within the project area.

#6-2 The natural heritage resources associated with this site are:

Eurybia surculosa Creeping Aster G4G5/S1S2/NL/NL

Leucothoe fontanesiana Highland Dog-hobble G5/S1S2/NL/NL

These rare plant occurrences are documented along a woods road and DCR recommends avoidance of direct impacts by any road building and other associated project activities.

#6-5 The natural heritage resources of concern at this site are:

Pseudosinella erehwon A cave springtail G2/S2/SOC/NL

Significant cave G3/SNR/NL/NL

A cave springtail has been documented within Coffin Cave associated with the Jasper Saltpetre Conservation Site, which is located within the project area (see Fig. 1). To minimize impacts to karst resources, DCR recommends reducing surface disturbance over the footprint of this cave. In addition, the stabilization of the soil around the sites should be prioritized during all the phases of the project and all standard erosion control measures that are appropriate for the sites should be used.

#6-8 The current activity will not affect any documented state-listed plants or insects.

#8-8 We would like to see surveys conducted at appropriate times in all stands for sensitive or rare species, and proper documentation.

Response: No ground-disturbing activities are planned on the Coffin Cave footprint. Surveys were conducted during timeframes when rare species could be detected. Qualified personnel conducted the surveys and the data is available in the project record.

Fire

Fire - #1: The Forest Service should describe the extent and purpose of the proposed fire treatments within the project.

#8-5 Exactly how many acres are you planning for prescribed burns, for what purpose and how is this area different that it requires the use of such fire?

Response: As noted in the *Prescribed Fire* section of the Proposed Action, the Forest intends to conduct prescribed burning on approximately 2,845 acres across multiple burn blocks after commercial harvests are completed. The intent is to maintain the desired forest structure, enhance foraging opportunities for wildlife, promote advanced oak regeneration in harvested areas, set back oak competitors, and encourage yellow pine regeneration where found.

Herbicides

Herbicides - #1: The Forest Service should not use the herbicide glyphosate in this project.

#3-5 Comment: Ranger Davalos, I ask you and your IDT members to have the courage to read the science conclusions of independent scientists not affiliated with the USFS in the Glyphosate kills attachment.[...]Request for changes to be made to the final NEPA document: Assure the following quote is included in the discussion of non-native invasive species: "herbicides that contain glyphosate will not be used anywhere, at any time, for any reason as part of this project."[...]If your final EA still approves the application of glyphosate you will violate NEPA because your FONSI is fraudulent.

Response: Tiering to the 2004 Jefferson National Forest Plan, the Forest is conducting a legitimate and sanctioned land management action to accomplish the vegetation and forest health standards.

The project is consistent with the forest plan, including the standard: FW-95: Herbicides and application methods are chosen to minimize risk to human and wildlife health and the environment. No class B, C, or D chemical (See Table 2-6) may be used on any project without the approval of the Regional Forester. Vegetable oil is used as the herbicide carrier when available and compatible with the proposed application.

Risk Assessments have been completed for the herbicides being proposed for use in the Project Area and can be found here; https://www.fs.fed.us/foresthealth/pesticide/risk.shtml

Under FSH 1909.12 subsection 07.12 – Determining Best Available Scientific Information, it notes that "… *the responsible official shall determine what information is the most accurate, reliable, and relevant to the issues being considered* …" (36 CFR 219.3). For those scientific sources that may still be in debate in peer-related forums or not yet accepted by the academic community, the source shall only be duly noted. Scientific information that would be found in academic textbooks or Forest Service sources shall be a guidance for this project.

NEPA

NEPA - #1: The Forest Service should analyze additional alternatives to the proposed action, including an alternative that does not construct any permanent or temporary roads, an alternative

that doesn't include timber harvest, an alternative that doesn't include prescribed fire, and an alternative focused on early successional habitat.

#3-3 Please analyze an action alternative that uses only existing roads.[...]Please don't claim the No Action alternative satisfies this request to not construct any new roads (temp or system). This project has a few beneficial actions that won't occur if No Action is selected. I just ask you to analyze an action alternative using only existing roads.[...]Request for changes to be made to the final NEPA document: Analyze a no new road construction (including temp roads) action (emphasis added) alternative in detail and assure the environmental effects disclosures are accurate which means you will discuss the resource damage that will be significantly reduced.

#3-4 Failure to analyze a timber sale with a no new road construction alternative will violate: 40 CFR 1500.2(e) and (f) because you did not choose to avoid or minimize adverse effects of the project upon the quality of the human environment without complete knowledge of all likely adverse effects and NEPA Sec. 101(b)(2) and (c)

#3-8 The range of alternatives in the pre-decisional EA is inadequate.[...]Comment: Pretending to pass a project through the NEPA process with only 1 action alternative (the Proposed Action) makes a mockery of the National Environmental Policy Act. A "do it" or "don't do it" NEPA analysis is not a NEPA analysis but a justification of the Proposed Action. There are alternatives ways to accomplish any goal.[...]Request for changes to be made to the final NEPA document: Analyze at least 1 additional action alternative in detail … preferably an alternative suggested by the public as part of their scoping comments. Also expand the Purpose & Need to allow non-harvest alternatives. Based on reading the scoping comments and your responses to these scoping comments there are clearly "unresolved conflicts" with this proposed timber sale.

#3-16 Comment: Ranger Davalos,[...]You have approved a Purpose & Need statement[...]that is so restrictive and narrow it gives you justification to reject all alternatives suggested by your public constituents that do not include logging. This assures your Proposed Action that you selected for implementation before you scoped the project would have no competition for selection. Clearly you failed to "consider" the alternatives suggested by the public as required by law. [...]Request for changes to be made to the final NEPA document: Include a new (expanded) Purpose & Need that allows reasonable alternatives to the Proposed Action to be analyzed in detail. This Purpose & Need must describe goals that can be achieved at different levels by different actions … specifically actions that don't include timber harvest. If this cannot be done, the timber harvest P&N goal must be eliminated.

#3-21 Your constituents asked you to analyze the following alternatives in detail in their scoping comments. Their requests were forthright and sincere.[...]The public knew their alternative suggestion met the Purpose & Need in spite of the fact the timber outputs were different than the Proposed Action.[...]you did not "Consider" the citizen-generated alternatives as required by law.[...]Here are the reasonable alternatives that the public asked you to analyze in detail.[...]No Temporary Roads No Prescribed Fire Maximize Available Early Successional Habitat Creation of Early Successional Habitat in Stands Harvested Within the Past 20 Years Increased Thinning Comment: As a retired USFS NEPA coordinator I know its routine for USFS NEPA documents to list all citizen generated alternatives in the "Considered but eliminated from detailed study" section.[...]This is certainly the case here. Request for

changes to be made to the final NEPA document: Analyze the citizen-generated alternatives in detail. [...]Failure to do so will clearly violate 40 CFR 1503.4.

Response: We are required by the National Environmental Policy Act (NEPA) to explore and evaluate reasonable alternatives to the proposed action when there are *"unresolved conflicts concerning alternative uses of natural resources."* In our analysis, we have not identified any such conflicts.

Although we are not required to analyze a "No Action" alternative for an Environmental Assessment (EA), this alternative was considered in the Turkey Cove project. The consideration of a "No Action" alternative is only a requirement for an Environmental Impact statement (EIS). Forest Service Handbook direction states at FSH 1909.15 – Ch. 10 § 14.2 that "*The EA may document consideration of a no-action alternative through the effects analysis by contrasting the impacts of the proposed action and any alternatives(s) with the current condition and expected future condition if the proposed action were not implemented. (36 CFR 220.7(b)(2)(ii)*".

Public comments that describe issues of concern help us identify alternatives, although we are not required to analyze these alternatives in detail provided that we briefly discuss the reasons for dismissal from analysis. These could include: that it does not respond to the project purpose and need; it is duplicative of the alternatives considered in detail; or it does not conform to existing law, regulation, or policy such as the Forest Plan. A list of the alternatives eliminated from detailed study, including no timber harvest, no temporary roads (the project proposes no new permanent road construction), no prescribed fire, and focus on early successional habitat, is included in the *Alternatives* section of the EA. We see no other reasonable alternatives that would adequately address the purpose and need.

NEPA - #2: The Forest Service should make the documentation in the project record that supports the Turkey Cove Habitat Improvement Project Environmental Assessment available to the public.

#3-19 Comment: 40 CFR 1502.21 allows you to incorporate material by reference. It also says: "No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment."[...]Comment: You hide important documents related to this project as hardcopies in the project record located in Norton Virginia. [...]Comment: Important information that would help the public understand the proposed project analysis disclosed in your draft EA is hidden away in the project file record.[...]Comment: There is absolutely (emphasis added) no reason to keep information from the public by hiding important documents in the project record. You could scan information and post the PDF files online. All information on file can be made available to the public as attachments. Especially relevant documents should be included in their entirely in an Appendix.[...]Request for changes to be made to the final NEPA document: Make ALL the documents that currently reside in the Project Record available as 1) online Appendices to the NEPA document, or 2) attach them to the EA.

Response: Documentation supporting the analysis summarized in the Environmental Assessment was posted with the EA on the project website at the beginning of the comment period on 2/22/2019. This information, including the project specialist reports, treatment maps, and the GW-Jeff Prescribed Fire Design, Implementation, and Monitoring document, is available online here: https://www.fs.usda.gov/project/?project=37322.

NEPA - #3: The Turkey Cove Habitat Improvement Project EA should include some source documents provided by the commenter in the References/Literature Cited section.

#3-18 Request for changes to be made to the final NEPA document: Include some source documents from the Opposing Views Science Attachments in the References/Literature Cited section, and also, cite the applicable specific quotes presented in the Opposing Views Science Attachments.

Response: A large majority of the opposing viewpoints contained in these attachments were found to be generalized opinions or not applicable to the proposed action. Others, when viewed in their entirety, were found to support the science used in the analysis.

As noted above, under FSH 1909.12 subsection 07.12 – Determining Best Available Scientific Information, "… *the responsible official shall determine what information is the most accurate, reliable, and relevant to the issues being considered* …" (36 CFR 219.3). Best available science, cited throughout the EA and the resource reports, was used in the analysis of effects; no additional citations were added from the sources provided by the commenter.

NEPA - #4: The Forest Service is legally required by 40 CFR 1502.9(b) to provide a meaningful responses to each responsible opposing view.

#3-2 Please prepare meaningful (emphasis added) responses to all (emphasis added) of my comments and include them in the final EA or EIS in the "Response to Comments" section.

#3-20 Request for changes to be made to the final NEPA document: Respond to each responsible opposing view quote contained in the Opposing Views Attachments Failure to do so will violate 40 CFR 1502.9(b). "(b) Final environmental impact statements shall respond to comments as required in Part 1503 of this chapter. The agency shall discuss at appropriate points in the final statement any responsible opposing view which was not adequately discussed in the draft statement and shall indicate the agency's response to the issues raised." Comment: As you can see above, 40 CFR 1502.9(b) requires meaningful responses to all "responsible" opposing views.

Response: The regulation cited, 40 CFR Part 1502, is specific to an Environmental Impact Statement (EIS) and is not applicable to the Turkey Cove Habitat Improvement Project Environmental Assessment. A large majority of the opposing viewpoints submitted by the commenter were found to be generalized opinions or not applicable to the proposed action.

Non-Native Invasive Species

NNIS - #1: The Forest Service should anticipate the threat from non-native invasive species (NNIS) within the project area and take appropriate measures to mitigate their potential impact.

#4-21 DEQ recommends that the use of herbicides or pesticides for construction or landscape maintenance should be in accordance with the principles of integrated pest management.

#6-3 DCR recommends an invasive management plan be developed and implemented to address this threat from invasives including all seed mixes used for revegetation contain only Virginia native species.

#8-10 Do not propose management that is likely to lead to new infestations of Non- Native Invasive Species (NNIS)[...]Control existing infestations and commit to necessary mitigation measures, including post-harvest assessments and treatment of NNIS. Do not propose management that would exacerbate existing infestations.

#8-11 Before management activities take place it is important to identify potential NNIS threats and develop a control/eradication plan that includes follow-up monitoring of any NNIS treatments for effectiveness.

#8-12 NNIS treatment is a mitigation measure that is essential and integral to this project and should be a top priority for KV and other funding

Response: On the ground conditions have been field verified and considered in the environmental analyses. A NEPA compliant decision has already been made Forest wide for the treatment of NNIS; the Turkey Cove Ruffed Grouse project will not "re-make" that decision and treatment of non-natives in the project are simply actions that are in compliance with the Forest-wide Non-Native Treatment decision.

Invasive species treatment is included in the EA as part of the proposed action and centers on locating and identification of non-native invasive species (NNIS) populations through general observations, pre ground-disturbance activity examinations, and post activity surveys. Areas with substantive existing invasive species populations, areas of disturbance with road access, or areas found to have new establishments of invasive species are identified and prioritized for treatment. There has been an ongoing treatment for invasive plants in this area for the past five years.

When detected inside or adjacent to a harvest unit, the NNIS is treated appropriately prior to implementation of a timber sale. Furthermore, there is a provision in the timber sale contract that requires a Purchaser to clean equipment when moving from an area known to be infested with NNIS or whenever the Purchaser is moving equipment from private property. Since it is unknown if the private property is infested with NNIS, the Forest Service assumes that NNIS are present and requires cleaning of Purchaser’s equipment so that the equipment is not a vector for NNIS seed.

Developing a district wide NNIS management plan, is outside the scope of this project. A well-established native seed mix, created by specialist will be used for erosion control and wildlife benefit.

Monitoring for NNIS continues past implementation as the Silviculturist assesses stands for timber stand improvement needs, including NNIS treatment.

Recreation

Recreation - #1: The Turkey Cove Habitat Improvement Project EA should address effects to recreation within the project area.

#8-19 … the proposed activities need to adequately address impacts to potential recreation in the area, beyond ruffled grouse habitat

Response: The effects to recreation from the activities proposed in the Turkey Cove project are summarized in the *Environmental Effects* section of the EA. The full recreation effects analysis can be found in the Turkey Cove Recreation Report available on the project website: https://www.fs.usda.gov/project/?project=37322.

Roads

Roads - #1: The Forest Service should obliterate all temporary and unauthorized roads after use.

#3-15 Comment: You indicate you will construct 1.3 miles of temporary road. I expect you to deal with temporary roads consistent with 36 CFR 212.5(b)(2). Pay special attention to the requirement that you "completely eliminate the roadbed by restoring natural contours and slopes."[...]Comment: We have all walked short sections of "temporary" roads that were constructed and located by employees working for the purchaser. Their goal was to minimize cost … not reduce aquatic damage by eliminating the possibility that sediment might enter streams.[...]Request for changes to be made to the final NEPA document: Obliterate (or decommission according to law) all temporary roads after use.

#3-23 Comment: USFS land managers know what to do right after an unauthorized, user-created road is discovered. They must be removed from the landscape completely (obliterated) and pile rocks and logs after they have been hydrologically stabilized so they won't appear (be rebuilt) again.[...]Request for changes to be made to the final NEPA document: Tell the public all unauthorized roads will be obliterated and rendered hydrologically stable.

Response: 36 CFR 212.5(b)(2) directs responsible officials to decommission or consider for other uses roads no longer needed to meet forest resource management objectives. The Forest Service plans to restore temporary roads to a more natural state by closing and revegetating after project implementation is complete. To minimize impacts to the environment and natural resources, previously disturbed areas will be used whenever possible. These include old temporary roads and existing non-system roads.

Unauthorized routes contribute to accelerated erosion and increased sedimentation that may impact water quality and disrupt the continuity of wildlife habitat. Project specific resource protection measures to minimize soils impacts and sedimentation effects to water quality have been included in the *Alternatives* section of the EA; rehabilitation of these impacted areas is one of the goals of this project.

Roads - #2: The Forest Service should develop a sustainable road network.

#8-14 The Forest Service needs to examine TAP recommendations and make decisions to help FS reach a sustainable road network, and not invest in roads that are recommended for downgrade.

Response: The interdisciplinary team reviewed the Transportation System Analysis Process (TAP) and Report (September 24, 2015) as it assessed travel management needs for this project area. More information can be found in the project Roads Analysis in the project file.

Timber Harvest

Timber Harvest - #1: Timber harvest activities on the project should be implemented in a way that would not risk erosion and sedimentation of creeks and rivers.

#4-4 Short-term water quality impacts resulting from surface runoff should be minimized by using Best Management Practices (BMPs). In general, DEQ recommends that stream and wetland impacts be avoided to the maximum extent practicable. To minimize unavoidable impacts to wetlands and waterways, DEQ recommends the following practices:

- Operate machinery and construction vehicles outside of stream-beds and wetlands; use synthetic mats when in-stream work is unavoidable.
- Preserve the top 12 inches of trench material removed from wetlands for use as wetland seed and root-stock in the excavated area.
- Design erosion and sedimentation controls in accordance with the most current edition of the Virginia Erosion and Sediment Control Handbook. These controls should be in place prior to clearing and grading, and maintained in good working order to minimize impacts to State waters. The controls should remain in place until the area is stabilized.
- Place heavy equipment, located in temporarily impacted wetland areas, on mats, geotextile fabric, or use other suitable measures to minimize soil disturbance, to the maximum extent practicable.
- Restore all temporarily disturbed wetland areas to pre-construction conditions and plant or seed with appropriate wetlands vegetation in accordance with the cover type (emergent, scrub-shrub, or forested). The applicant should take all appropriate measures to promote revegetation of these areas. Stabilization and restoration efforts should occur immediately

after the temporary disturbance of each wetland area instead of waiting until the entire project has been completed.

- Place all materials which are temporarily stockpiled in wetlands, designated for use for the immediate stabilization of wetlands, on mats, geotextile fabric in order to prevent entry in State waters. These materials should be managed in a manner that prevents leachates from entering state waters and must be entirely removed within thirty days following completion of that construction activity. The disturbed areas should be returned to their original contours, stabilized within thirty days following removal of the stockpile, and restored to the original vegetated state.
- Flag or clearly mark all non-impacted surface waters within the project or right-of- way limits that are within 50 feet of any clearing, grading, or filling activities for the life of the construction activity within that area. The project proponent should notify all contractors that these marked areas are surface waters where no activities are to occur.
- Employ measures to prevent spills of fuels or lubricants into state waters.

#4-5 Submit a Joint Permit Application (JPA) for impacts to surface waters and wetlands, as necessary

#4-15 The vegetation management activities should follow the following recommendations:

- Utilize BMPs on the project site including erosion and sedimentation controls and spill prevention and countermeasures.
- Carefully manage materials on site and during transport to prevent impacts to nearby surface waters.

#8-21 In order to ensure that ground disturbing activities would not risk erosion and sedimentation of creeks and rivers, we believe the Forest Service should avoid ground-based logging on area with steep slopes and high erosion-hazard soil types.

#8-22 District should analyze GIS data as a "first filter" to help avoid ground-based logging in areas with steep slopes and high erosion-hazard soil types

#8-23 Forest Service should analyze the slopes and soils in proposed logging areas, including considering soil erosion hazards and soil suitability for logging roads, log landings, and ground-based timber harvest, and to consider avoiding riskier site or adding mitigation.

Response: The Forest Service follows or exceeds all Virginia Department of Forestry (VDOF) Best Management Practices (BMPs). All applicable standards in the Jefferson National Forest Land and Resource Management Plan will be followed. Streams and wetlands were mapped and will be avoided during implementation consistent with forest plan standards and project-specific resource protections measures As related to the watershed improvement activities, no instream work is currently planned. Should instream work be found necessary, all relevant guidelines will be followed for the work planned.

A Joint Permit Application (JPA) will be completed if the stream restoration project is large enough to warrant one.

A sediment analysis was conducted for this project and found the risk of sedimentation into area streams was minimal.

The potential impacts of ground disturbance related to the timber harvesting have been assessed in the EA in the soil resource, hydrology, and geology sections. Logging plans have been used to assess impacts on soil productivity, soil erosion, sedimentation, slope stability, and water quality.

Field surveys of the area indicate many slopes in and adjacent to treatment units are far less than 35% slope. The comment states that soils are characterized by high erosion risk, however, the erosion risk of project area soils is typically not high when ground cover is maintained. Project vegetation treatments are expected to maintain or increase ground cover.

Timber Harvest - #2: The Forest Service must consider the high volume of clearcutting happening on private land.

#8-1 The Forest Service must consider high volume of clearcutting happening on private land. Cumulative impacts from increased and intensive logging on private lands nearby or adjacent to the project should be taken into consideration when developing alternatives and determining the level of ESH to create within the project.[...]It is our understanding that you are taking such timbering, mostly clear cuts into consideration. But, how exactly are you doing this?

#8-2 If you are indeed obtaining this information could you share it with us? If you are not, why not?

#8-15 The Forest Service must consider high volume of clearcutting happening on private land.

Response: Activities, including timber harvesting, on lands adjacent to the project area were considered in the cumulative effects analyses. The interdisciplinary team evaluated direct, indirect, and cumulative effects from events or activities on all lands within the analysis area(s). Cumulative effects are documented in the specialist reports and Chapter 3 of the EA.

The Forest Plan was followed to meet the early successional habitat objectives of management prescriptions. The Forest Plan direction applies only to national forest system (NFS) lands. Thus, the Turkey Cove Ruffed Grouse project was developed to move toward the desired condition specific to NFS lands only and is consistent with the Forest Plan.

Timber Harvest - #3: The Forest Service should describe what it means to remove excess biomass.

#8-17 We would like much more information and would like to better understand what is meant by the removal of "excess biomass"[...]We request information on the methods and processes involved in

identification of areas where this is deemed appropriate, the collection of this material, its transport, impacts on areas from which it will be harvested, and potential sale.

Response: The removal of excess biomass involves trees being cut and removed from the site to meet habitat objectives. This removal includes the tree limbs and tops, which are typically left on-site and are collectively known as slash. The removal of biomass is similar to traditional harvest methods, except that the slash is chipped and removed by van type trailers. Areas considered for biomass removal were determined based on habitat needs and fuels management, in consideration of sensitive soils.

Wilderness

Wilderness - #1: The Forest Service should disclose any roadless or Wilderness areas within the project.

#8-18 Are there any potential Roadless Areas or wilderness areas within the project boundaries?

Response: There are no inventoried roadless areas (IRAs) within the Turkey Cove project area. IRAs were identified in the national 2001 Roadless Area Conservation Rule (RACR). The RACR prohibited road construction and reconstruction in IRAs and outlined roadless area characteristics. IRAs are characterized as having an undeveloped character and are valued for many resource benefits including wildlife habitat, biological diversity, and dispersed recreation opportunities. There has been no subsequent effort to identify any additional IRAs, therefore there is no process to identify "potential" inventoried roadless areas.

There are no congressionally designated Wilderness Areas within the project area. The direction in Forest Service Manual (FSM) 1909.12 – Land Management Planning Handbook, Chapter 70 - Wilderness describes a broadly inclusive process for inventorying and evaluating lands for their potential as wilderness to make recommendations whether any lands within a plan area should be recommended for wilderness designation by Congress. Per FSM direction:

> "This inventory of potential wilderness is not a land designation, nor does it imply any particular level of management direction or protection in association with the evaluation of these *potential wilderness areas*".

This inventory is completed with the express purpose of identifying all lands that meet the criteria for being evaluated for wilderness suitability and possible recommendation to Congress for wilderness study or designation. Potential wilderness areas are not defined or considered outside of this process.

Wildlife

Wildlife - #1: The Turkey Cove Habitat Improvement Project EA should provide more analysis of wildlife issues such as the need for additional ruffed grouse habitat and the effects to migratory birds.

#3-1 You do not provide the public with any information describing how you determined there was a shortage of the species in and near the sale area. On page 4 you say: "This management prescription area emphasizes providing optimal habitat for the ruffed grouse, an economically important small game bird that has experienced population declines throughout its range."

#3-7 Request for changes to be made to the final NEPA document: Identify the birds that exist in and near the project area that are protected under the Migratory Bird Treaty Act and discuss how these birds will be protected during burning and timber harvest operations. The Act makes no allowance to consciously harm these birds for any reason.

#3-22 Comment: Mr. Lane, the Purpose & Need statement you helped write at page 7 says "Create and enhance terrestrial, riparian, and aquatic wildlife habitat.". Please explain how logging 1.3 square miles and building 1.3 miles of road will "Create and enhance terrestrial, riparian, and aquatic wildlife habitat" given the clear science written by experts quoted below that say it won't.[...]Request for changes to be made to the final NEPA document: Eliminate the untrue P&N statement that tells the public the Turkey Cove timber sale will: "Create and enhance terrestrial, riparian, and aquatic wildlife habitat."

#8-3 Concerning the decline of these two birds, how is that being documented?

Response: The decline of ruffed grouse is range-wide. Devers et al (2007) found that:

> *"Data collected as part of the United States Geological Survey Breeding Bird Survey show a -5.0% population change per year (P= 0.05, 11 = 56 routes; Sauer et al. 2004) in ruffed grouse population indices in the Appalachians over the last 3 decades."*

The relationship between young, dense forests and ruffed grouse is well-documented and 5-20 year old stands are crucial for the birds to forage, reproduce, and survive (Devers et al 2007, Whitaker et al). Harvesting timber creates and enhances habitat for ruffed grouse and other early-seral birds (Devers et al 2007). Riparian habitat will be enhanced through the removal of non-native white pines and the proposed road decommissioning will enhance aquatic habitat through limiting the amount of sediment entering Collier Hollow Creek.

The direct, indirect and cumulative effects of proposed actions on migratory bird species of concern, (including bald and golden eagles) are analyzed and disclosed for any avian Threatened, Endangered, Sensitive and locally rare species identified to be present, or likely to be present based on suitable habitat, within the projects area. In addition, avian Management Indicator Species (MIS) are designed to represent the suite of migratory bird species that require similar habitat needs on the George Washington and Jefferson National Forests. Direct, indirect and cumulative effects of proposed actions on these migratory bird species are analyzed and disclosed for these species through MIS. Effects analyses of the proposed action are summarized in the *Threatened, Endangered, and Sensitive*

Species, *Locally Rare Species*, and the *Management Indicator Species* sections of the EA. The full analysis can be found in the *Turkey Cove TESLR Report* and the *Turkey Cove MIS Report*, available on the project website (https://www.fs.usda.gov/project/?project=37322).

The Forest Service has a ruffed grouse monitoring route in the project area, but it simply does not provide the data needed to draw conclusions. We relied on the range-wide conclusions for the documentation of decline and follow the Forest Plan guidance for this species.